

Title (en)
Plasmon grating biosensor

Title (de)
Biosensor zur Plasmonenrasterung

Title (fr)
Biocapteur de réseau à plasmon

Publication
EP 2060904 A1 20090520 (EN)

Application
EP 07301545 A 20071113

Priority
EP 07301545 A 20071113

Abstract (en)
The present invention discloses a novel concept for real-time, high-sensitivity optical biosensing that is suitable for cheap and simple incorporation in existing standard microscopes, and other similar apparatuses. Moreover, the present invention proposes to use surface plasmon polaritons (SPPs) on gold structured surfaces to localize the excitation and/or detection volume in an optical biosensor to a range <500 nm above the substrate surface. According to some embodiments the excitation and detection are performed on the substrate side, and the structure of the metal film is designed such that the excitation and the emission light path travel nearly perpendicular to the metal film.

IPC 8 full level
G01N 21/55 (2006.01)

CPC (source: EP)
G01N 21/6458 (2013.01); **G01N 21/648** (2013.01); **G01N 21/658** (2013.01); **G01N 21/7743** (2013.01); **G01N 2021/6439** (2013.01)

Citation (applicant)
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 2060904 A1 20090520; WO 2009063368 A2 20090522; WO 2009063368 A3 20090702

DOCDB simple family (application)
EP 07301545 A 20071113; IB 2008054645 W 20081106